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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,146	11/21/2003	Byung-Koo Ahn	038779/271618	2112
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/719,146

Applicant(s)

AHN ET AL.

Examiner

Saket K. Daftuar

Art Unit

2151

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 11/07/05.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

1. Claims 1-12 are presented for the examination.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed and received.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 2, and 7 recites the limitation "the Bluetooth protocol". There is insufficient antecedent basis for this limitation in the claims.

Claims 3-6 and 8-12 depend upon independent claim 1. Therefore, there is insufficient antecedent basis for this limitation in the claims.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-7 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aarnio U.S. Patent Number 7,010,500 B2 (hereinafter Aarnio) in view of Palermo

et al. U.S. Patent Number 5,771,438 (hereinafter Palermo), Schindler et al. U.S. Patent Number 5,838, 384 (hereinafter Schindler) and further in view of Treyz et al. U.S. Patent Number 6,678,215 B1 (hereinafter Treyz).

As per claim 1, Aarnio discloses an online music-data-providing system via a Bluetooth headset, comprising: a music-data-providing server for providing music data on line through a network (Abstract, column 1, line 55 – column 2, line 2); a mobile communication system connected to the network (column 2, lines 16-18); a mobile station for wirelessly accessing the mobile communication system, and performing the Bluetooth protocol for short range links (see figure 2, block 26 Bluetooth communicating with block 28 Terminals, column 3, line 15 – column 4, line 9); and a Bluetooth device, having a Bluetooth function for performing the Bluetooth protocol, for performing short range radio links by the Bluetooth protocol to the mobile station, receiving the music data from the music-data-providing server through the mobile station, reproducing them, and outputting them (see figure 2, block 26 Bluetooth communicating with block 28 Terminals, column 3, line 15 – column 4, line 9).

Aarnio discloses Bluetooth devices However Aarnio failed to disclose that Bluetooth device being a headset installed in a vehicle.

Palermo teaches a headset (see Figure 3, column 1, lines 31-56).

Treyz teaches that Bluetooth device is installed in a vehicle (applied to audio devices other than radio such as automobile personal computer, personal

computer with audio cards and speaker, see column 8, lines 25-40; column 9, line 66 – column 10, line 24).

Therefore, it would have been obvious to one having ordinary skilled in the art at the time the invention was made to obtain a predictable result for distributing audio-video data from a database or server on network to a network subscriber automatically and periodically by using a wide area network and a wireless communication network and efficiently providing online subscription services to a users or drivers operating Bluetooth wireless headset installed in a vehicle that efficiently enable users or drivers to make and receive calls with minimal physical and cognitive interaction.

As per claim 2, Treyz teaches the Bluetooth headset comprises: a Bluetooth communication unit for performing short range radio links by the Bluetooth protocol to the mobile station (see column 9, line 66 – column 10, line 24 and Figure 2) comprising a microphone for receiving an external voice and outputting a corresponding voice signal, for processing the voice signal output through the microphone and outputting the same (see Figure 4); and a controller for controlling the Bluetooth communication unit, the decompressor, the audio output unit, and the voice coder to control the whole operation of the headset(see Figure 4, column 8, lines 34-46, column 12, lines 46-55, column 14, lines 24-35).

However Treyz is silent about a decompressor for decoding the music data received from the mobile station through the Bluetooth communication unit, and decompressing them and a voice coder.

Schindler teaches a decompressor for decoding the music data received from the mobile station through the communication unit, and decompressing them (see Figures 4, block 412, 416); an audio output unit (see Figures 3, block 338 and 340) for processing the music data decompressed by the decompressor, reproducing them, and outputting them so that a user may listen to them through a plurality of speakers; a voice coder (see Figures 3-7 and 12, Figures 5 and 12 include audio decoder).

As per claim 3, Treyz teaches the music-data-providing server provides streaming music data and general music data, and the decompressor determines types of the music data provided by the music-data-providing server to perform a decompression operation (see column 9, lines 8-34).

As per claim 4, Treyz teaches the decompressor [inherent communication circuitry] decompresses the music data in real-time while receiving the music data from the mobile station and outputs them to the audio output unit when the music data are streaming music data, and the decompressor decodes the music data and decompresses them after the music data are completely transmitted from the mobile station when the music data are general music data (Figure 4, column 14, lines 24-35).

As per claim 5, Schindler teaches the decompressor comprises: a first decryptor [Figure 5, block 530, 510, 512] for decompressing streaming music data; a decoder for decoding general music data; and a second decryptor [Figure 5, block 530, video decoder decoding video and audio signals blocks 544, 546,

548] for decompressing the music data decoded by the decoder (see Figure 3-7 and 12).

As per claim 6, Schindler teaches the audio output unit comprises: a D/A converter (Figures 5-6, blocks 622, 640) for converting the music data decompressed by the decompressor into analog signals; and an amplifier (Figure 6, block 616, 646, Figure 3, blocks 338, 340) for amplifying the analog signals output by the D/A converter and outputting them to the speaker (see figure 12).

As per claim 7, Aarnio teaches the mobile station comprises: a wireless transmitting and receiving unit for receiving the music data from the music-data-providing server through radio links to the mobile communication system (see Figure 2, blocks 20 and 32 server, and block 25 mobile and wireless network for communication); a user interface for receiving a user instruction, outputting it, and displaying predetermined information to the user (inherits in mobile terminal and see figure 3 for user command instruction in block 108, 109, and 116 of Figure 3, decision making commands); a Bluetooth communication unit for performing short range radio links by the Bluetooth protocol to the Bluetooth headset(see column 3, line 50 – column 4, line 9); and a controller for controlling [inherits in mobile terminal, 28 and 25 of Figure 2] the wireless transmitting and receiving unit, the user interface, and the Bluetooth communication unit to control the whole operation of the mobile station(see column 3, line 50 – column 4, line 9).

As per claim 12, Aarnio in view of Palermo teaches the Bluetooth headset may call another Bluetooth headset located in the vicinity of the Bluetooth headset (Bluetooth headset communicating to the wireless devices in short range distance).

7. Claims 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aarnio U.S. Patent Number 7,010,500 B2 (hereinafter Aarnio) in view of Palermo et al. U.S. Patent Number 5,771,438 (hereinafter Palermo), Schindler et al. U.S. Patent Number 5,838, 384 (hereinafter Schindler), Treyz et al. U.S. Patent Number 6,678,215 B1 (hereinafter Treyz) and further in view of Chen U.S. Patent Number 5,974,333 (hereinafter Chen).

As per claim 8, Aarnio, Palermo, Schindler and Treyz discloses Bluetooth headset receiving data from music data providing server.

However, Aarnio, Palermo, Schindler and Treyz failed to disclose the Bluetooth headset temporarily or completely stops reproducing the predetermined music data, and performs a hands-free function on the mobile station.

As per claim 8, Chen in view of Aarnio and Treyz discloses the Bluetooth headset temporarily or completely stops reproducing the predetermined music data, and performs a hands-free function on the mobile station (see column 4, lines 31- 58).

Therefore, it would have been obvious to one having ordinary skilled in the art at the time the invention was made to obtain a predictable result for

distributing audio-video data from a database or server on network to a network subscriber automatically and periodically by using a wide area network and a wireless communication network and efficiently providing online subscription services to a users or drivers operating Bluetooth wireless headset installed in a vehicle that efficiently enable users or drivers to make and receive calls with minimal physical and cognitive interaction.

As per claim 9, Chen discloses the temporarily stopped music data are reproduced again after the external telephone call is finished (column 4, lines 31-58).

As per claim 10 Aarnio, Palermo, Schindler and Treyz discloses an external voice call access request is provided to the mobile station while the Bluetooth headset receives predetermined music data from the music-data-providing server.

However, Aarnio, Palermo, Schindler and Treyz failed to disclose the Bluetooth headset temporarily or completely stops reproducing the predetermined music data, and performs a hands-free function on the mobile station.

Chen in view of Aarnio and Treyz discloses the Bluetooth headset temporarily or completely stops reproducing the predetermined music data, and performs a hands-free function on the mobile station (see column 4, lines 31-58).

Therefore, it would have been obvious to one having ordinary skilled in the art at the time the invention was made to obtain a predictable result for distributing audio-video data from a database or server on network to a network subscriber automatically and periodically by using a wide area network and a wireless communication network and efficiently providing online subscription services to a users or drivers operating Bluetooth wireless headset installed in a vehicle that efficiently enable users or drivers to make and receive calls with minimal physical and cognitive interaction.

As per claim 11, Chen discloses the temporarily stopped music data are reproduced again after the external telephone call is finished (column 4, lines 31-58).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See accompanying PTO 892 form.

a. Portable telephone terminal apparatus for receiving data and data receiving method therewith by Masatoshi Saito U.S. Patent Number 6,658,247.

b. Wireless provision of audio content by Gershon Kandler U.S. Patent Number 7,116,939 B1.

9. A shortened statutory period for reply to this non-final action is set to expire **THREE MONTHS** from the mailing date of this action. Failure to respond within the period for response will result in **ABANDONMENT** of the applicant (See 35 U.S.C 133, M.P.E.P 710.02,71002 (b)).


Contact Information

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saket K. Daftuar whose telephone number is 571-272-8363. The examiner can normally be reached on 8:30am-5:00pm M-W.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on 571-272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SKD

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